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Review

Discrimination of Research Object in Academic Papers

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Abstract: By mainly employing the literature review method, this study analyzes the research objects in academic papers. The results indicate that, unlike the meanings in academic disciplines (or courses) or in the process of solving physics problems, the use of the term "research object" in academic papers exhibits the following characteristics: (1) Except in medical papers — where the term is clearly defined (primarily referring to humans and animals) — in general academic papers and in some research methods textbooks the term is commonly used without a strict definition, seemingly established by convention. (2) Although there is occasional mixing with terms related to samples (such as sampling groups and observation objects), the research object is generally considered relative to the overall population. (3) Differences in the limitations or focal points of the research content may lead to changes in the research object. (4) In social research methods, the unit of analysis replaces the research object and can express the complex meaning of the research object more accurately. (5) A lack of clear understanding of the research object may lead to "elevation errors" and "degradation errors" in research.

Keywords: academic papers; research object; unit of analysis; research content

1. Introduction

In the teaching of scientific research methods (hereinafter "research methods"), the term "research object" is an unavoidable technical term. However, most textbooks on research methods do not offer a definition for the research object; indeed, a few research methods textbooks hardly mention the term at all. At the same time, many theses involve issues concerning the research object. On the other hand, when describing the characteristics of a discipline (or course), the term "research object" is frequently used; it is also common in the resolution of problems in secondary school physics. Then, do the various meanings of "research object" coincide? Precisely because of this, in the reading of academic papers, in the writing of theses, and in their review, one often finds instances of misuse of the term "research object", specifically manifested in that: (1) It is confused with "survey object" (or test object, sampling object, experimental object, etc.); (2) It is conflated with research content; (3) It appears that it can denote not only human and animal subjects but also social products and social phenomena; (4) In some papers, where the research object is difficult to determine, the term is simply omitted.

What exactly is meant by "research object" in academic papers? Motivated by this question, the present paper reviews a large body of literature, organizes and analyzes the material, and systematically differentiates the research object. In doing so, it distinguishes the different meanings — and even the different names — that the research object may have under various circumstances. In this way, the discussion not only serves to "cast a brick in order to attract jade", thereby enriching the content of research methods textbooks, but also provides a valuable reference for postgraduates and researchers in standardizing the use of the term "research object".

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2. Literature Review

With the rapid development of information technology and the exponential growth of academic literature, automatic parsing and information extraction from scholarly texts have become prominent research topics. The extraction and differentiation of research objects in academic papers not only involve analyzing text structures and syntactic patterns [1] but also require deep semantic understanding [2]. In many complex fields, such as reliability engineering and system maintenance [3-9], systematic approaches to component identification and classification have yielded valuable insights. These interdisciplinary strategies inspire analogous methodologies for research object extraction in academic texts.

2.1. Structure of Academic Papers and Definition of Research Objects

Early research focused on segmenting academic papers into standard sections, such as abstracts, introductions, methodologies, results, and discussions, to identify characteristic patterns [10]. This process is conceptually similar to methods used in reliability studies, where systems are divided into components for detailed analysis [11,12]. By statistically analyzing structural and syntactic patterns, scholars laid the groundwork for defining the research objects typically present in each section.

2.2. Rule-based and Feature-Engineering Methods

In the initial stages of research object extraction, rule-based approaches were widely adopted [13]. Researchers developed a series of rules, using keyword matching, syntactic parsing, and fixed textual patterns to capture potential research objects. These techniques are reminiscent of early reliability models that used fixed sampling plans and acceptance criteria [14,15]. Although rule-based methods are straightforward and relatively easy to implement, they often struggle with the diverse expressions and interdisciplinary terminologies found in academic papers, limiting their effectiveness in complex contexts.

2.3. Machine Learning and Deep Learning Approaches

More recently, machine learning and deep learning techniques have brought significant advances in the automatic identification of research objects [16]. Traditional machine learning methods, such as support vector machines and decision trees, classify text by constructing feature vectors and have shown promising results. Deep learning approaches, using models like recurrent neural networks and Transformers, leverage large-scale corpora to capture contextual relationships and semantic nuances. In many respects, these advances mirror developments in fields such as fault diagnosis and system resilience, where dynamic models are used to handle varying conditions and complex interactions [17-19].

2.4. Challenges and Future Directions

Despite these advancements, challenges remain in extracting and distinguishing research objects. Rule-based techniques often falter when handling domain-specific terminologies and complex sentence structures, much like their limitations in early system reliability models [14,15]. Deep learning methods, while offering high recognition rates, are heavily dependent on large volumes of annotated data and can suffer from issues related to model generalization. Moreover, variations in formatting and expression across different academic disciplines make it difficult for a single model to be universally effective. Future research could benefit from integrating multi-domain data, developing cross-domain models, and incorporating multimodal approaches and ideas that are also gaining traction in reliability engineering and maintenance optimization.

In summary, while the current body of research on identifying and differentiating research objects in academic papers has established a solid foundation, the continuous

expansion of scholarly literature and evolving research needs call for more precise and versatile automatic recognition models. Drawing inspiration from systematic classification methods in other fields, this paper proposes a novel approach to research object discrimination that aims to achieve breakthroughs in both accuracy and robustness.

3. Research Methods

3.1. Literature Review Method

The consulted literature was classified into the following categories: (1) Textbooks on research methods; (2) Textbooks on pedagogy, curriculum studies, etc.; (3) Relevant academic papers available on the China National Knowledge Infrastructure (CNKI).

3.2. Survey and Interview Method

The issue of the research object was investigated by interviewing some researchers, teachers engaged in related courses, postgraduate supervisors, and graduate students. For instance, in a postgraduate research methods exam, questions on the research object were included.

3.3. Logical Analysis Method

The research content was differentiated using inductive reasoning, deductive reasoning, comprehensive (comparative) analysis, and other logical analysis techniques.

4. Results and Analysis

4.1. Analysis of Research Objects in Academic Disciplines (or Courses)

The German philosopher Hegel once stated: "Regarding the object, at the outset of every science two questions must be answered: first, does the object exist? second, what exactly is this object?" Then, what exactly is an object? The *Ci Hai dictionary* defines an object as "that which is the target of an action or thought" given in Table 1. The *Great Chinese Dictionary* defines an object as "that which is the target of an action or thought, whether a person or thing". Unfortunately, no complete definition of "research object" can be found.

Table 1. Some Academic Disciplines (or Courses) and Their Research Objects.

Discipline (or Course)	Research Object
Archival Science	(1) Archival phenomena; (2) the essence and laws of archives.
Vocational Education	Facts, values, norms, and practical issues in vocational education.
Jurisprudence Methodology	Legal thinking, legal logic, interpretation of law, and the value orientation in the application of law.
Library Science	Libraries or the library profession; the complete set of laws governing library work and activities.
Modern Educational Research Methods	Various scientific methods in educational research.
New Institutional Economics	Institutions.
Education	Educational phenomena, issues, and laws.
Teaching and Learning	Educational phenomena and educational laws.
Educational Management	Problems in educational management, or objects that have become problematic in educational management.
Modern Teaching Theory	Teaching problems.
Sports Statistics	The statistical regularity of random phenomena.
School Sports	School sports and its regularities.

Sports Curriculum Theory	Issues in sports curriculum.
Modern Sports Teaching Theory	Problems related to teaching and learning in sports.

A discipline's research object is "the target of observation and contemplation". Research indicates that the determination of a discipline's research object is a fundamental condition for its independent existence; the research object defines the discipline's nature, basic content, and theoretical framework. For example, in general education the debate regarding the research object persists, with many views coexisting without convergence. "Every science has its own specific research object, only by clarifying the research object can scientific research commence; only by scientifically defining the research object can a rigorous scientific theory and system be established." As one scholar stated, "For any discipline, a matter of life and death is to clearly define its own research object and task."

Some studies have indicated that every discipline has its own specific research object and that its definition follows certain laws. In summary, these definitions mainly include the "activity theory", "process theory", "law theory", "relation theory", "phenomenon theory", "system theory", etc., or a combination thereof. In addition, due to differences in subjective understanding and research perspectives, even within the same discipline, different schools, angles, or historical periods may lead to different definitions of the discipline's research object. Nonetheless, as can be seen from Table 1, the research object of a discipline (or course) is closely related to its research content and, in many cases, is essentially the main research content.

4.2. Analysis of Research Objects in the Process of Solving Physics Problems

For simplicity, consider the following multiple-choice question as an example. (Refer to the figure on the right in the original text.) Two spherical bodies A and B of equal mass are connected by a light rod such that $OA = AB$. When they are released from the horizontal position of the rod with no initial velocity and allowed to swing about point O until reaching the vertical position, the mechanical energy of the system is analyzed as follows:

Analysis: Besides the gravitational forces acting on A and B, the light rod also exerts a force on them. Does this force perform work? A light rod can generate a force in any direction; however, in this case, does the force act along the rod? Under these circumstances, the scope of the research object may be expanded such that the mechanical energy analysis of the system includes the light rod, ball A, and ball B as a whole. For this three-object system, apart from gravity, there is also the force exerted by the O-axis on the light rod, which obviously does no work. Therefore, the mechanical energy of the system is conserved. Because the light rod is massless, its gravitational potential energy and kinetic energy need not be considered. Hence, the mechanical energy of balls A and B is conserved, indirectly proving that the force of the light rod on ball A always acts along the rod and performs no work on the system composed of balls A and B.

In many academic papers related to problem-solving in physics, the term "research object" appears frequently. As seen in the above example, here the research object refers to the object of investigation, analysis, or observation, generally referring to objects or persons. By decomposing or combining the object of investigation, practical physics problems can be solved.

4.3. Analysis of Research Objects in Academic Papers

Literature shows that documents or studies specifying the definition or requirements for the research object in academic papers or theses are virtually nonexistent. For example, the national standard of the People's Republic of China, "Formatting for Scientific and Technical Reports, Theses, and Academic Papers" (GB7713-87), does not specify

this term except for a brief mention of "survey object" in section 6.4. In our review, we found that in medical research there is a special stipulation regarding the research object. The description is as follows:

Basic requirements for writing about the research object in medical papers: In medical papers, the description of the selection, basic conditions, and the methods and observation indicators used for the research object (i.e., human or experimental animal subjects) is often included in sections titled "Materials and Methods", "Subjects and Methods", or "Data and Methods". In clinical trial research, it should be stated whether the trial procedure has been approved by the ethics committee of the relevant institution or region and whether the research object or its relatives have been informed and have signed an informed consent form. When patients serve as the observation object, the sources of the case and control groups, the inclusion criteria, and the general information should be specified; when needed, the exclusion criteria should also be stated. In clinical randomized controlled trials, the design of the intervention method (including randomization) and the use of blinding should be explained. When experimental animals are used as the research object, details such as the name, strain, grade, quantity, source, sex, age (in years or months), body mass, rearing conditions, health status, and the certificate number of the experimental animals should be provided.

In medical papers, one can be certain that the research object refers to the observation object or experimental object, primarily encompassing human and animal subjects. A study that analyzed 518 master's theses in the field of football research (from 1981 to 2009) classified their research objects (see Table 2) and found that approximately 57% used human subjects as the research object while the remaining 43% used other objects. However, the question "What is the research object?" was not specifically defined in that study, which may have led to statistical errors (refer to the analyses of Topics *B* and *C* in Table 3).

Table 2. Statistics of Research Objects.

Category	Subdivision (Percentage, %)	Total (Percentage, %)
Humans	Youth athletes: 17; Institute students: 8; Outstanding athletes: 8; Female athletes: 8; University students: 7; Coaches: 3; Referees: 3; Fans: 2; Goalkeepers: 1	57
Others	Football matches: 16; Tactical analysis: 5; Professional football: 5; School football: 5; Amateur football: 3; Football culture: 2; Youth football clubs (or schools): 1; Competition systems: 1; Others: 5	43

Note: Data have been rounded approximately according to the original table's format.

Table 3. Research Object, Unit of Analysis, and Research Content of the Topics.

Topic Name	Research Object	Survey Object	Unit of Analysis	Research Content
A: Survey on the Annual Income of University Teachers in a Certain City	All university teachers in a certain city	A sample of 1,000 teachers was surveyed	Every university teacher in the city	Teachers' income situation
B: Evaluation of Graduate Classroom Teaching Quality at a Certain School	Teachers who teach graduate courses at a certain school	A questionnaire survey of 200 graduate students at the school	Every teacher who teaches graduate courses at the school	Teachers' teaching quality

C: Athlete Selection: Theoretical and Empirical Research	Athlete selection (a phenomenon)	A survey of 1,000 coaches and 5,000 athletes	Athlete selection (as a social fact)	The theory and practice of athlete selection
D: Annual Income Survey of University Teachers in a Certain City	Private and public universities in a certain city	Teachers selected from 10 private and 10 public universities	Private and public universities in a certain city	Income disparities among teachers in universities of different types

4.4. Analysis of Research Objects in Research Methods Textbooks

In thesis writing, during the stages of proposal preparation, thesis planning, and thesis defense, an explanation regarding "research object and methods" is typically provided. Then, what exactly is the research object and is there a strict definition? This paper carefully examined and read research methods textbooks in the fields of sociology, education, psychology, and sports; the relevant information is briefly organized in Table 4.

Table 4. Definitions and Usage of "Research Object" and "Unit of Analysis".

Source & Author	Research Object (Definition/Usage)	Unit of Analysis (Definition/Usage)
Social Research Methods Tutorial. Yuan Fang.	Research object: Not defined; rarely mentioned; "survey object" is used more often (e.g., on p. 683 in Chapter 22 "Writing a Research Report", an introduction of the research object is provided: "In a research report, one often needs to describe the persons and their activities that constitute the research object, especially in experimental or survey research.")	Unit of analysis: On p. 151 defined as "generally equivalent to the sampling unit, though sometimes it may differ"; also lists five types: individual, group, organization, community, and social product.
Sociological Research Methods. Feng Xiaotian.	Research object: Not defined, but mentioned more frequently (for example, when defining "unit of analysis" on p. 75, the term is also used).	Unit of analysis: Defined on p. 75 as "in social research, the research object is called the unit of analysis, in other words, the unit of analysis is the object (person or thing) being analyzed or described." Also lists five types.
Social Research Methods. Ail Barby.	Research object: Not defined; in Volume I on p. 140 (discussing "population and sampling") the research object is taken as the totality, mainly referring to human subjects; in the "research proposal" on p. 143, it is listed, again mainly referring to human subjects.	Unit of analysis: Defined on p. 120 as "that which is used to examine and summarize the characteristics of similar things and explain the differences among them." Lists four types: individual, group, organization, and the social person as a fact.
Social Science Research Methods. Lin Jurin et	Research object: Not defined; on p. 79 in "Research Proposal Design" the term "unit of analysis" is used directly	Unit of analysis: Defined on p. 71 as "the basic unit in research, i.e., the research object." It is

al.	(rather than "research object"). In the two sample research proposals given, one does not mention the unit of analysis or research object, and the other only lists the survey object. In Chapter 18 "Ethical Issues" on p. 381, the term appears frequently, mainly referring to human subjects.	also noted that "research content is an attribute or a certain characteristic of the unit of analysis." Lists five types.
Social Research Methods. Gao Yan et al.	Research object: Not defined, mentioned very rarely.	Unit of analysis: Defined on p. 34 as "the object to be described and analyzed by the researcher; it is the basic unit of research." Lists five types.
Social Survey Research Methods. Zhang Rong.	Research object: Not defined, mentioned very rarely.	Unit of analysis: Defined on p. 95 as "the basic unit for investigation and sampling by the researcher. Generally equivalent to the sampling unit, though sometimes they differ." Lists four types.
Modern Educational Research Methods. Li Fang.	Research object: Not defined; mentioned very little. For example, on p. 301 in "General Structure of Academic Papers" there is no list of research objects. In "Writing an Experimental Research Report" on p. 312, the research object is listed, and it is emphasized that in educational experiments the research object is human.	Unit of analysis: Not mentioned.
Educational Research Methods. Yuan Zhen Guo.	Research object: Not defined; not mentioned (appearing only as subjects, teachers, students, etc.). In two research cases, it is not mentioned at all.	Unit of analysis: Not mentioned.
Introduction to Educational Research Methods. William Wellsman.	Research object: Not defined; not mentioned (appearing only as subjects, teachers, students, etc.). In both "Components of a Research Proposal" (p. 482) and "Components of a Research Report" (p. 494), it is not mentioned.	Unit of analysis: Not mentioned.
Introduction to Educational Research Methods. Meredis D. Gao'er.	Research object: Not defined; mentioned on p. 72 in the chapter on "Ethics in Educational Research" (using the term "subject", mainly referring to human subjects).	Unit of analysis: Not mentioned.
School Educational Science Research. Shi Tiertu.	Research object: Not defined, but mentioned more frequently.	Unit of analysis: Not mentioned.
Introduction to	Research object: Not defined, though it	Unit of analysis: Not mentioned.

Educational Research Methods. Pei Dina.	is mentioned.	
Psychological Research Methods. Huang Xiting et al.	Research object: Defined on p. 403 as "the research object (participants) is sometimes also called the subject or sample, that is, it explicitly indicates 'who' is the object of this research."	Unit of analysis: Not mentioned.
Psychological Research Methods. Wang Chongming.	Research object: Not defined, mentioned infrequently.	Unit of analysis: Not mentioned.
Sports Science Research Methods. Zhang Liwei.	Research object: Not mentioned. In three research cases presented later (starting on p. 706), only one case mentions it.	Unit of analysis: Defined on p. 13 as "referring to the entity containing the main characteristics to be examined," without further classification.
Sports Science Research Methods. Yang Nianjun et al.	Research object: Not mentioned; it is listed on p. 53 in the "Research Proposal Format".	Unit of analysis: Not mentioned.
Sports Science Research Methods. Huang Hansheng et al.	Research object: Not defined; mentioned in "Design of the Research Object" (p. 69) and "Sampling" (p. 73).	Unit of analysis: Mentioned on p. 85 in "Determining the Sampling Scheme", without definition.
Introduction to Sports Science Methods. Yang Shiyong.	Research object: Defined on p. 241 as "referring to the specific persons or things researched in this project." On p. 255 in "Thesis Writing," it is not mentioned; in the four thesis examples starting on p. 266, only one thesis lists it.	Unit of analysis: Not mentioned.
Sports Science Research Methods. Textbook Compilation Group.	Research object: Not defined; it is listed in "Formulating a Research Proposal" (p. 46), "Example of a Sports Research Proposal" (p. 47), and "Reference Format for a Sports Research Work Plan" (p. 54).	Unit of analysis: Not mentioned.
Research Methods in Physical Activity. Jerry R. Thomas.	Research object: Not defined; on p. 69 "Describing Participants", p. 90 "Protecting Human Participants", and p. 92 "Protecting Animal Subjects" the term is used.	Unit of analysis: Defined on p. 104 as "a question related to sampling and statistical analyses is labeled as the unit of analysis." No further classification is provided.

Table 4 indicates that regardless of the type of research methods textbook, there is essentially no clear definition of the "research object". It appears to be a conventional term that is casually employed throughout the text. Even in chapters such as "Writing a Research Proposal (Plan)" and "Thesis Formatting", its inclusion is optional; when it does appear, it is merely listed without providing strict specifications or definitions, and in some cases, it is even used interchangeably with terms such as "survey object", "experimental object", and "observation object".

Through the review of social (or sociological) research methods textbooks as reflected in Table 4, it was found that in sociological research, although the term "research object" is also used, there is a stronger tendency to employ the term "unit of analysis". Although there are some differences in the definitions of the "unit of analysis", its overall meaning is very similar to that of the "research object". Comparatively, in sociological research, the specialized term "unit of analysis" can more accurately convey the meaning of the "research object".

From Table 4 it can be observed that the relationship among the research object, the whole, the sample, sampling, the unit of analysis, and various objects (survey object, experimental object, observation object, participant, etc.) is not interchangeable, even though many cases in Table 4 show mixed usage. This study holds that:

1) From a statistical perspective, the research object is defined relative to the research population. In actual research, one deals with a sample rather than the totality; in survey research the term "survey object" may appear, in experimental research "experimental object" may appear, and in observational research "observation object" may appear. (See Topic *A* in Table 3 for reference.)
2) From the perspective of thesis writing, the "research object and methods" section in a thesis always refers to the overall population, while the specific research method (e.g., survey, experiment, or observation) is detailed by listing the corresponding type of object (i.e., survey object, experimental object, or observation object). (See Topic *A* in Table 3.)
3) Although the definitions of the unit of analysis are not unified, the appearance of the unit of analysis helps in deepening the understanding of the research object. As can be seen from Topics *B* and *C* in Table 3, if one infers the research object solely from the survey object, errors may occur (this is also one possible reason for the statistical errors in Table 2); in contrast, the unit of analysis is closely connected with the research object. Relatively speaking, the definitions provided by Yuan Fang and Feng Xiaotian in Table 4 are more reasonable.
4) The research object or unit of analysis is limited by the research content. Different focal points in the research content may lead to changes in the research object (or unit of analysis). For example, in Topics *A* and *D* in Table 3 the emphasis of the research content is different, leading to different research objects (or units of analysis). If one research project were to include both the content of Topic *A* and Topic *D*, then that project would have two units of analysis (according to some social research methods textbooks that allow the unit of analysis to change) or two research objects (a notion that is not found elsewhere since no research shows that the research object in one academic paper is changeable).
5) In scientific research, an unclear understanding of the research object may lead to two types of errors: elevation errors and degradation errors.

4.5. Two Types of Errors in Relation to Research Objects

The so-called "degradation error", also known as the ecological fallacy or the fallacy of division, refers to a phenomenon in sociological research where a researcher collects data from a higher-level research object (unit of analysis) but draws conclusions based on a lower-level research object (unit of analysis).

For example, in Topic *E* of Table 5, a study on urban crime found: "Cities with a larger floating population have higher crime rates than cities with a smaller floating population," and from this data, the conclusion was drawn: "The crime rate of the floating population is higher than that of the non-floating population." This is a degradation error, as data was collected at the city level but the conclusion was drawn at the level of the floating population.

Table 5. Errors Caused by Inconsistencies in Research Objects in Unified Studies.

Topic Name	Research Finding	Conclusion	Type of Error
Topic E: Urban Crime Research	Cities with a large floating population have significantly higher crime rates than cities with a small floating population.	The floating population has a higher crime rate than the nonfloating population.	Degradation Error (Ecological Fallacy). Data collected at the city level is used to conclude about a subgroup.
Topic F: Research on Causes of Poverty in the Third World	It was found that the personality characteristics of leaders in many poor countries are particularly prominent.	A country's development depends on its leader's personality.	Elevation Error (Simplification/Reductionism). Using an individual-level characteristic (leader) to explain a complex social phenomenon (social development).

Similarly, the conclusion that "Christian countries have higher suicide rates than Buddhist countries" leading to the statement "Christians have higher suicide rates than Buddhists" is based on the same flawed reasoning. While it may occasionally hold true, the reasoning method is fundamentally incorrect.

In contrast to the degradation error is the "elevation error," also known as simplification or reductionism. This refers to a phenomenon in sociological research where a researcher collects data from a lower-level research object (unit of analysis) but draws conclusions about a higher-level research object (unit of analysis).

For example, as shown in Topic *F* of Table 5, a researcher might use the personality characteristics of a national leader to draw conclusions about the social development of the country. The error here is in using a specific characteristic (research object: leader) to explain and account for a complex social phenomenon (research object: social development). This leads to the simplification error, as factors such as political systems, natural resources, educational levels, and technological advancements also affect social development. This is similar to the situation where psychologists focus only on psychological traits, economists on economic traits, and sociologists on social traits when explaining human behavior. Although there may be some truth in such approaches occasionally, the reasoning method is incorrect.

5. Conclusions

Although the research object of a specific discipline (or course) remains a matter of debate, generally speaking the research object of a discipline (or course) is inseparable from its research content and, in many cases, essentially constitutes the main research content.

In secondary school physics problem-solving, the research object generally refers to the object of investigation, analysis, or observation – typically referring to objects or persons – and may be manipulated by decomposing or combining the object of investigation to solve practical physics problems.

In medical research papers, the research object is clearly stipulated as the observation object or experimental object, primarily referring to human and animal subjects.

An analysis of research methods textbooks reveals that: (1) The term "research object" is used as a common term without a strict definition, having been established by convention; (2) The research object is frequently confused or used interchangeably with terms such as sample group, survey object, experimental object, participant, or subject; (3) In social research methods, the use of the unit of analysis more accurately expresses the complex meaning of the research object, in effect, the unit of analysis is equivalent to the research object; (4) From a statistical perspective, the research object refers to the overall population; when a specific research method is applied (such as survey, experi-

ment, or observation), a particular type of object (i.e., survey object, experimental object, or observation object) appears; (5) From the viewpoint of thesis writing, the "research object and methods" section in a thesis always refers to the overall population, while the specific type of research (survey, experiment, or observation) is detailed in the research methods section; (6) The research object (or unit of analysis) is limited by the research content, and differences in the focus of research content may lead to changes in the research object (or unit of analysis).

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